

What is claimed is:

Sub A1

1. A receiving apparatus for a digital broadcasting for receiving a digital broadcasting which is transmitted by a transport stream in which video data and audio data have been compressed and multiplexed, comprising:

a decoder for decoding said transport stream;
a digital interface for mutually transmitting and receiving the transport stream to/from digital signal processing devices; and

a register for selecting a predetermined number of devices among a plurality of digital signal processing devices connected to said digital interface and allocating identification numbers to said selected devices.

2. An apparatus according to claim 1, wherein said register stores the identification numbers allocated to said selected digital signal processing devices and maintains a registration, whether said selected digital signal processing devices has been connected to said digital interface or not.

3. An apparatus according to claim 1, wherein said register confirms whether the device which is connected has already been registered together with the identification number or not when said digital signal processing device is connected to said digital interface.

4. An apparatus according to claim 1, wherein
said register automatically registers said
predetermined number of devices which were first
connected among the devices connected to said digital
interface.

5. An apparatus according to claim 1, wherein
said register can change the contents of registration
by a user input.

6. An apparatus according to claim 1, wherein in
case of the devices in which a program recording
reservation has been set or the connected devices among
the equipment which have previously been registered,
said register prohibits a cancellation of a
registration.

7. An apparatus according to claim 1, further
comprising a display processing circuit for displaying
a list of said registered devices.

8. An apparatus according to claim 7, wherein
said display processing circuit for displaying the list
of said registered devices displays so that the devices
connected to said digital interface and the devices
which are not connected among the registered devices
can be visually discriminated.

9. An apparatus according to claim 7, wherein in
the case where a changing operation of the registration
is performed to the devices in which a program
recording reservation has been set or the connected

devices among the devices which have previously been registered by said register, said display processing circuit performs a predetermined warning display.

10. An apparatus according to claim 1, further comprising display means for displaying a selection screen to select devices from said registered devices.

11. A recognizing method of digital signal processing devices connected to a digital broadcasting receiving apparatus through a digital interface, comprising:

a selecting step of selecting a predetermined number of devices from a plurality of digital signal processing devices which are connected to said digital interface; and

a registering step of allocating identification numbers to the devices selected in said selecting step.

12. A method according to claim 11, wherein in said registering step, the identification numbers allocated to said selected digital signal processing devices are stored and registered, whether said selected digital signal processing devices have been connected to said digital interface or not.

13. A method according to claim 11, wherein in said registering step, when said digital signal processing device is connected to said digital interface, whether the device to be connected has

already been registered together with the identification number or not is confirmed.

14. A method according to claim 12, wherein in said registering step, said predetermined number of devices which were first connected among said devices connected to said digital interface are automatically registered.

15. A method according to claim 11, wherein in said registering step, the contents of registration can be changed by a user input.

16. A method according to claim 11, wherein in said registering step, in case of the devices in which a program recording reservation has been set or the connected devices among the devices which have previously been registered, a cancellation of a registration is prohibited.

17. A method according to claim 11, further comprising a display processing step of displaying a list of said registered devices.

18. A method according to claim 17, wherein in said display processing step of displaying the list of said registered devices, said list is displayed so that the devices connected to said digital interface and the devices which are not connected among the registered devices can be visually discriminated.

19. A method according to claim 17, wherein in said display processing step, in the case where a

changing operation of the registration is performed to
the devices in which a program recording reservation
has been set or the connected equipment among the
devices which have previously been registered in said
register, a predetermined warning display is performed.

5

20. A method according to claim 11, further
comprising a display processing step of displaying a
selection screen to select devices from said registered
devices.